

CLAIMS

What is claimed is:

1. A solid electrolyte capacitor comprising:

a capacitor element having a anode and a cathode; and

5 a electrolyte being a conducting compound formed by interactions between a conducting polymer and a non-conjugate polymer and filling between the anode and the cathode.
2. The solid electrolyte capacitor in claim 1, wherein said the conducting compound having an interpenetration network structured conducting compound.
3. The solid electrolyte capacitor in claim 1, wherein said the conducting compound
10 having a semi-interpenetration network structured conducting compound.
4. The solid electrolyte capacitor in claim 1 wherein said the conducting polymer is a conjugate conducting polymer selected from the group consisting of thiophene, pyrrole, aniline and derivative polymers from these three compounds.
5. The solid electrolyte capacitor in claim 1 wherein said the conducting polymer is
15 poly(3,4-ethylenedioxythiophene).
6. The solid electrolyte capacitor in claim 1 wherein said the non-conjugate polymer is a polymer with a functional group selected from the group consisting of epoxy, hydroxyl and carboxyl.
7. The solid electrolyte capacitor in claim 1 wherein said the non-conjugate polymer is
20 a synthesized from precursor group with a functional group selected from the group consisting of epoxy, hydroxyl and carboxyl.
8. The solid electrolyte capacitor in claim 1 wherein said the non-conjugate polymer is synthesized from monomer with a functional group selected from the group consisting of

epoxy, hydroxyl and carboxyl.

9. The solid electrolyte capacitor in claim 1 wherein said the capacitor element is surrounded by a layer of non-conjugated polymer layer.